

Diving From a Springboard: part 1 – The Forward Approach

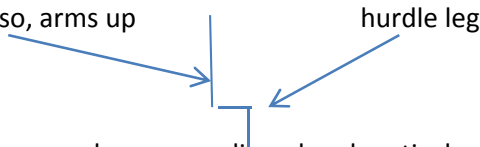
Last time, we talked about diving safely from the deck. This month, we're starting a series on diving from the diving board. Because springboard diving is so complex, it cannot be covered in one article. I'll do my best to give you the basics that will provide a foundation for diving correctly from a springboard. Before you can do any dive from a springboard properly, you first must know how to do a proper approach. There are two of them: forward and backward. Although there are really four directions to dives, all four are covered with the two approaches. Dives can be forward, backward, inward, or reverse in direction. We're starting with those that are either forward or reverse. These two employ the forward approach. One last caveat, the approach described below is the classic 4-step. The newer hop-hurdle approach is quite different. Both are very common today.

Body Alignment – The key to successful diving is not the exhilaration of multiple spins and twists, but basic, solid, disciplined body alignment. This is what truly separates divers from tricksters. Lots of people can “throw a trick” from a diving board, but they'll never get a high score at a diving meet without proper position, kick-out, and rock solid body alignment. Good divers constantly work on body alignment, and do countless drills to emphasize this critical element. Poor body alignment will rear its ugly head immediately upon starting the approach, and become increasingly troublesome as the approach continues and transitions into a dive. What IS good alignment?

- Back flat – hips in a pelvic tilt position, with the rectus abdominus muscle contracted. This muscle connects the pubic bone to the sternum and is a broad band that can become a “six pack” if worked out enough. Practice contracting this muscle by lying on your back and sticking your hand under the small of your back. Now smash your hand without lifting your hips off the ground. After mastering this, do it standing up. Use a mirror and/or a buddy to check your alignment. Your tummy should not stick out, nor should your back be arched. Both should be flat and vertical when standing.
- Head neutral – don't “put your chin on your chest” as you may have been taught before. Why not? Because it will misalign your body, and it's not necessary to do a nice dive. To go head first, push your hips up and pull your arms down immediately after. I call this the push-pull action. A head tucked entry will result in poor alignment and often a roll onto the shoulders. Equally counterproductive is a head back position. You will land face first, and tend to arch your back. In ALL head first dives, your ears should be between your arms, with your head in line. When doing a back or reverse dive head first, it's wise to look at your hands, but never with your head outside of your extended arms. Try to avoid putting your head way back.
- One straight line – From your heels to the top of your head should be one straight line at the point of maximum board deflection, both when doing the hurdle, and when taking off. This straight line will focus the energy generated by the push of your feet through your body, and not out. Safe distance is achieved by leaning slightly forward, not by pushing out with your feet. Coaches often call this “riding the board.” By properly riding the board, the diver achieves maximum height as well as safe distance. Resist the temptation to hop off, and throw your hips forward as you take off. Instead, maintain the one straight line to propel you like a rocket high into the air. In other words, do “rocket dives” not “rainbow dives.”

Walk forward – Begin your forward approach by establishing your starting position and straight-line body alignment. The starting position is roughly 5 steps from the end of the board, or somewhere around the longest fulcrum setting. Trial and error will determine where your spot is. Once found, keep it! Next, take 3 regular steps toward the end of the board, followed by one longer step. These steps are regular length, and heel-toe, just like normal walking. The 4th step is your press step, so it is more pronounced, foot lands flat, but quiet, and your knee bend is more dramatic than a normal step. As you step into the press, your arms go back behind you in a simultaneous motion. What you do with them before that is up to you; although there are some typical patterns that divers do. My favorite is: hold for steps 1-2, forward on step 3, then back on step 4 (press). The swing forward on step 3 is small – only about 12-15” in front of your hips. The back swing on 4 is farther back, to prepare for the up-swing into the hurdle.

Press and hurdle – Remember your press step (#4) is about 1/3 longer, with the entire foot placed at once, and without sound. This occurs at about the first drainage slot. Bend your press leg to almost 90 degrees and shift your weight from step 3 to the press leg (#4) as you swing your arms forward and upward. The board should depress as you swing your arms past your hips. When your arms are straight up alongside your head, the board should be all the way down and your hurdle leg up, making a chair shape:



Here, your torso and arms are aligned and vertical, your hurdle leg is bent at 90°, with your thigh horizontal, lower leg pointed down and toe pointed. Now, take off as the board recoils and lifts you up. As you come up off the board, bring your hurdle leg back down to align with your press leg. This is the peak of the hurdle, called the “suspension” of the hurdle because you seem to hang there for a second or two before coming back down on the end of the board for the take-off.



press step



hurdle



suspension of hurdle



Maximum board deflection, just before take-off.

Maximum board deflection - occurs only once, but deflection occurs twice – first during the press and hurdle (in-between the press step and hurdle photos), and again as shown here at the end of the board. Notice the dramatic angle of deflection with these Olympic divers, and the head up position. The diver to the left/top has a better alignment than his counterpart, but both are going to go very high indeed! The classic “arms cocked” position is what you see here. This is the last part of the arm swing, where the diver is ready to “throw” the dive. This position is used for forward and inward dives. The “backward C” take-off position is used for backward and reverse dives.

Arm swing – In the 4-step classic approach the arms usually swing forward on step 3, back on 4, then up on the hurdle. They swing up to help depress the board. They come down behind your back as you descend from the suspension of the hurdle to land on the end of the board. At the point of contact with the board, your arms should be just behind your hips. As your legs straighten into the final press, your arms swing up again. At maximum deflection (see above) your arms are back up again. The entire arm swing can be counted as forward-back-up-around-up. A good phrase for the entire 4-step approach arm swing is 1-2-forward-back-up-around-up.

Summary – The entire approach can be counted as 1-2-3-press-kick-bounce-reach. Practice the approach in straight position first, to focus on body alignment, soft & quiet feet, and good timing of the arms/legs. Remember the one straight line principle as shown below, and have fun!!

